

**AMENDMENTS TO THE TITLE:**

Please change the title to read as follows:

“Analytical Method Involving Detection Of An Exciplex”.

**AMENDMENTS TO THE SPECIFICATION:**

At page 18, between lines 23 and 24, insert the following section heading

**Brief Description of the Drawings**

Delete the paragraph beginning at page 18, line 24 and insert the following new paragraphs in lieu therof.

Figures 1A-1K illustrate the chemical structures of various hybridisation constructs as investigated in the following Examples. All of the constructs shown in Fig 1 have the same nucleic acid sequences for the target and probes as set out in Example 1 for SP-1, SP-19 and SP-34.

Figure 2 illustrates the emission spectra of SP-1 in Tris buffer (10 mM TRIS, pH 8.5, 0.1 M NaCl) in the presence of hexafluoro-2-propanol additive (50%) compared with 80% TFE additive.

Figure 3 illustrates the emission of spectra of SP-1 in Tris buffer (10 mM TRIS, pH 8.5, 0.1 M NaCl) in the presence of tetrafluoro-1-propanol additive (50% and 70%) compared with 80% TFE additive.

Figure 4 illustrates the emission spectra of SP-1 in Tris buffer (10 mM TRIS, pH 8.5, 0.1 M NaCl) in the presence of ethylene glycol (50% and 70%) compared with 80% TFE additive.

Figure 5 illustrates the emission spectra of SP-19 in Tris buffer (10 mM TRIS, pH 8.5, 0.1 M NaCl) in the presence of ethylene glycol additive (50% and 70%).

Figure 6 illustrates the emission spectra of SP-34 in Tris buffer (10 mM TRIS, pH 8.5, 0.1 M NaCl) in the presence of ethylene glycol dimethyl ether additive (80%) compared with 80% TFE additive.

Figure 7 illustrates the emission spectra of SP-34 in Tris buffer (10 mM TRIS, pH 8.5, 0.1 M NaCl) in the presence of ethylene glycol dimethylether additive (80%).

Figure 8 illustrates the emission of spectra of SP-17 in Tris buffer in the presence of 80% TFE additive.

Figure 9 illustrates the emission of spectra of SP-18 in Tris buffer in the presence of 80% TFE additive.

Figure 10 illustrates the emission of spectra of SP-19 in Tris buffer in the presence of 80% TFE additive.

Figure 11 illustrates a study of the exciplex emission of SP-19 in 80% TFE at temperatures of 15°C, 20°C, 25°C, 40°C with cooling back to 10°C.

Figure 12A illustrates the emission spectra of SP-19 and Figure 12B displays the emission spectra of SP-23 both recorded in Tris buffer containing 80% v/v TFE so as to provide a comparison of the relative effectiveness of perylene and pyrene as the acceptor partner for an exciplex with the same donor partner.

Figure 13 illustrates the emission of spectra of SP-1, SP-4 and SP-19 in Tris buffer in the presence of 80% TFE additive.

Figure 14 illustrates the emission of spectra of SP-18 and SP-20 in Tris buffer in the presence of 80% TFE additive.

Figure 15A illustrates the emission spectra for the RNA-based SP-19 exciplex system comparing the RNA target to the equivalent DNA target system (SP-19). Figure 15B illustrates the emission spectra of 5-pyrene-bearing oligo (ON1-5'pyrene) and the full RNA-BASED SP-19 system in Tris buffer at 10°C. Figure 15C illustrates emission spectra of RNA-based SP-19 IN Tris buffer at various TFE concentrations. Figure 15D Illustrates the emission spectra of the RNA-BASED SP-19 system in 70% TFE/Tris buffer.

Figure 16 illustrates melting curves for RNA-based SP-19 in 72% TFE/Tris buffer.

Figure 17 illustrates emission spectra for the SP-19 exciplex system with mismatch targets before heating.

Figure 18 illustrates emission spectra for SP-19 exciplex system with insertion targets before heating.

Figures 19A and 19B provide a graphical comparison of the data shown in Tables 2 and 3, respectively.

Figure 20 illustrates the emission of spectra of SP-25 in Tris buffer in the presence of 80% TFE additive and in the absence of TFE additive.

Figure 21 illustrates the emission of spectra of SP-26 in Tris buffer in the presence of 80% TFE additive.

Figure 22 illustrates the emission spectra of ON1-5' pyrene and ON2-3' Naphthalene in the presence of target strand in Tris buffer and in the presence of sulfolane.

Figure 23 illustrates the emission spectra for the SP-19 system in 80% TFE/Tris buffer in the presence of 0.1 and 1.5 M betaine and in the absence thereof.

Figure 24 illustrates the emission spectra for the SP-19 system in 80% TFE/Tris buffer in the presence of 0.15 and 0.5 M sulfolane and in the absence thereof.

Figure 25 illustrates the emission spectra for the SP-19 system in 80% TFE/Tris buffer in the presence of 0.6 and 1.1 M Methylsulfone and in the absence thereof.

Figure 26 illustrates the emission spectra for the SP-19 system in 80% TFE/Tris buffer in the presence of 1.41M DMSO and in the absence thereof.

Figure 27 illustrates the UV/visible absorption spectra of unmodified ON1 (5'pTGTTTGGC) and ON1-5'pyrene in 50% v/vacetonitrile.

Figure 28 illustrates the UV/visible absorption spectra of unmodified ON1 (5'pTGTTTGGC) and ON1-5' Np in 50% v/vacetonitrile.

Figure 29 illustrates the emission spectra of the SP-3 split-probe system in 80% TFE/Tris butter.

Figure 30 illustrates the emission spectra of the SP-38 split-probe system compared with those for the 5' Pryene oligo and 5'Pryene oligo+ target DNA, the spectra being recorded in 80% TFE/Tris buffer.

Figure 31 illustrates the emission spectra of the SP-2 split-probe system compared with those for the ON2-3' Pryene oligo, the spectra being recorded in 80% TFE/Tris buffer.

Figure 32 illustrates the emissions spectra for a construct based on the SP-19 system but in which one of the probes contained 3 LNE residues, the spectra being recorded in 80% TFE/Tris buffer.

Figure 33 illustrates the emission spectra for a construct based on the SP-19 system but in which one of the probes contained 3 LNE residues and had a mismatch for the target, the spectra being recorded in 80% TFE/Tris buffer.